# IN THE UNITED STATES DISTRICT COURT FOR THE MIDDLE DISTRICT OF PENNSYLVANIA

JANE E. FISHER, Executor of the : Estate of Bradley Fisher, Deceased, :

VS.

PEMCO, INC.,

.

Plaintiff

3:CV-99-1976

(CHIEF JUDGE VANASKIE)

CLARK AIKEN MATIK, INC., MARQUIP, INC., WILL-PEMCO, INC., Successor in Interest to Clark Aiken Matik, Inc., a/k/a

:

Defendants

### <u>ORDER</u>

**January 18, 2006** 

#### THE BACKGROUND OF THIS ORDER IS AS FOLLOWS:

Defendant Marquip, Inc., has moved in limine to preclude the testimony of Joby G.

Williamson, an expert in automated machinery controls retained by Plaintiff in this wrongful death products liability action.<sup>1</sup> As set forth in this Court's Memorandum opinion of September

¹Marquip requested a hearing only if deemed necessary by this Court. Plaintiff did not request a hearing. "An in limine hearing is not always required whenever a <u>Daubert</u> objection is raised to a proffer of evidence, and whether to hold a hearing rests in the sound discretion of the trial court." <u>Parkinson v. Guidant Corp.</u>, 315 F. Supp. 2d 754, 756 n. 1 (W.D. Pa. 2004). In this case, the parties have presented the report and deposition testimony of the expert in question. Neither party has suggested the need for consideration of other evidence. Under these circumstances, an evidentiary hearing is neither warranted nor required. <u>Id</u>.

26, 2005, the factual background for this action is as follows:

In this case, the product of concern is a complicated piece of machinery used by the International Paper Company at its plant located in Hazleton, Pennsylvania. Specifically, involved in this accident was a paper "splicer" designed and manufactured by Defendant Marquip, Inc., and incorporated into a "sheeter" machine designed and manufactured by co-Defendant Will-Pemco, Inc., successor-in-interest to Clark Aiken Matik, Inc.

The sheeter line operated at the International Paper plant starts with very large rolls of heavy paper as raw material. The paper rolls are unspooled, and the sheeter line ultimately cuts the heavy paper to the desired length and stacks the cut paper. There are two pairs of roll stands that unspool the paper rolls, and each pair of roll stands is capable of feeding one roll of paper at a time to the sheeter line. A Marquip splicer is located above each pair of roll stands. The purpose of the Marquip splicer is to allow the sheeter line to run continuously by eliminating the need to stop the sheeter to allow for re-threading the paper each time a roll of raw material paper has been exhausted.

The splicer includes an element referred to as the "dancer roller," which is intended to move along the splicer in accordance with the size of the roll of paper being processed. Movement of the dancer roller is enabled by a sensor called a "potentiometer." The potentiometer is connected to the dancer system by a chain located in the "dancer track area."

The chain interacts with the potentiometer. The dancer system itself is connected to air cylinders by cables. The air cylinders provide the force that moves the dancer roller.

The Marquip splicer is an integral component of the sheeter machine. It enables the equipment to run 24 hours a day, 7 days a week. The sheeter itself is a unique machine, specifically designed and manufactured for use by International Paper at its Hazleton plant.

On June 14, 1999, Bradley Fisher, a maintenance mechanic who had worked for International Paper for about 10 years, sustained fatal injuries in an accident involving the sheeter/splicer. The accident occurred while Fisher, with the assistance of Emil Kitlan, was attempting to dislodge a broken potentiometer chain. Kitlan, in response to an inquiry from International Paper employee Ray Adams, indicated that it was unnecessary to shut down the machinery.<sup>2</sup>

Fisher climbed onto a paper roll stand, the top of which was approximately 3 feet above the ground, to dislodge and remove the chain. Kitlan climbed onto a catwalk above Fisher and the Marquip splicer. In order to dislodge the chain, Mr. Fisher removed a guard that covered a sprocket. Mr. Fisher was feeding the chain to Mr. Kitlan, who was standing above him. Prior to completely removing the chain, Mr. Fisher told Mr. Kitlan to stop pulling on the chain. An instant later, Mr. Kitlan "heard something let go," and out of the corner of his eye saw the dancer roller spring forward towards Mr. Fisher. The dancer roller pinned Mr. Fisher's head against one of the stationary rolls, crushing his skull and causing fatal injuries.

Plaintiff claims that the sheeter/splicer was defective because of the absence of adequate warnings about the potential for sudden movement of the dancer roller if the machinery is not placed in a "zero energy state." Plaintiff also contends that the product was defective because entry into the machinery did not trigger an automatic shut down process.

(Memorandum Opinion of September 26, 2005, Dkt. Entry 262, at 2-4.)

Essential to the automated operation of this complex machinery is the Siemens

Programable Logic Control ("PLC"). The Siemens PLC effectively controls the movement of the

<sup>&</sup>lt;sup>2</sup>Shutting down the machinery would have been an extended process and would have complicated starting a new roll of paper, thereby slowing production. Kitlan evidently did not perceive any danger in proceeding with the repair.

Marquip dancer roller in the splicing operation. Plaintiff's proposed expert, Joby Williamson, explained the operation of the Siemens PLC as follows:

[T]he Siemens PLC controls the pressure feeding the dancer cylinders to force the dancer into the extended position with maximum pressure. The PLC monitors the position of the dancer using feedback from the dancer potentiometer. A potentiometer is a feedback device that has a shaft that can be rotated. As the shaft is rotated the potentiometer sends a signal indicating the rotary position of the shaft. In the Marquip slicer, the potentiometer shaft is connected to a sprocket. This sprocket is rotated by a chain connected to the dancer. Thus, by monitoring the signal from the potentiometer, the Siemens PLC can determine the position of the dancer. When the dancer is close to the home position the PLC increases the signal to the pressure controller to maximize air pressure to the dancer cylinder, thus maximizing force applied to the dancer.

(Williamson Report of January 10, 2003 at 2.)

Based upon evidence produced during discovery, Mr. Williamson described the sequence of events resulting in the fatal mishap. (Id. at 3.) According to Williamson, the dancer roller should have returned to its home position after completing a splice, but was stopped in its travel. Both the web of paper being fed into the sheeter and the potentiometer chain were observed to be broken. In attempting to remedy the problem, Mr. Fisher, a maintenance mechanic, along with Emil Kitlin, attempted to remove the broken potentiometer chain. As described by Mr. Williamson:

Removing the chain from the sprocket must have caused rotation of the potentiometer. The PLC, believing that the dancer had reached the home position, continued to the next step in its logic

and proceeded to lock the dancer into position. In order to lock the dancer, the PLC increased pressure to the dancer cylinders, which resulted in increased force on the dancer. At that point the dancer accelerated unusually rapidly and struck Mr. Fisher in the head, pinning him between the dancer and another part of the machine.

(<u>ld</u>.)

- Mr. Williamson expressed the following conclusions:
  - 1. The machine lacked adequate and necessary safeguards to prevent users of the machine from the regular or unexpected movement of the dancer. . . .
  - 2. There were no warnings regarding the danger listed above. . . .
  - 3. The machine lacked adequate safeguards such as a light curtain that would have deactivated the machine when the operator entered the path of the dancer. . . .
  - 4. The e-stop circuit was not properly designed. The e-stop cut all discrete outputs from the machine, but the variable pressure transducer which controls the motion of the dancer still operates, even though the e-stop had been pressed.
  - 5. The machine was not designed to shut down in the event that the dancer stopped or the potentiometer feedback system failed.
  - 6. The system did not have a pneumatic release valve to bleed the system, in the event that e-stop was pressed, when the chain broke, or when the dancer became jammed.
  - 7. Two machines with conflicting control schemes were installed on the same line. This required customization of the controls of the Marquip splicer, resulting in a control system that displayed performance deficiencies, and this system was not well understood by the manufacturer's employees themselves.

(<u>ld</u>. at 4-5.)

Marquip contends that Williamson lacks the requisite specialized knowledge with respect to the machinery in question to opine as an expert in this case. Expertise with respect to the specific machinery in question is not a prerequisite to qualify as an expert witness. See Holbrook v. Lykes Bros. S.S. Co., 80 F.3d 777, 782 (3d Cir. 1996). In this case, Mr. Williamson's credentials in the subject of machine controls are impressive. He has worked on automated machine controls in several industries. His background includes work with a Siemens PLC. His deposition testimony confirmed his knowledge of programable logic controls as used in this case. Plaintiff proffers Williamson as a person who can explain to the jury how the machinery in question was intended to operate. This is plainly a matter beyond the ken of an average lay person. Rule 702 of the Federal Rules of Evidence permits admission of testimony of a person qualified by knowledge, skill, experience, training or education to "assist the trier of fact to understand the evidence or to determine a fact in issue." Mr. Williamson clearly has the requisite specialized knowledge gained by education, training and experience to testify with respect to the interrelationship between the Siemens PLC and the operation of the dancer roller involved in this accident. His qualifications would extend to expressing opinions as to the feasibility of incorporating automatic shutdown capability in the event of a stoppage of the dancer roller or failure of the potentiometer feedback system.

It does appear, however, that opinions as to other matters extend beyond his area of

expertise. In particular, the record discloses no specialized knowledge with respect to guarding of pinch points or hazard warnings. Nonetheless, he has opined that "[t]he machine lacked adequate and necessary safeguards to prevent users of the machine from the regular or unexpected movement of the dancer." (Williamson Report of January 10, 2003 at 4.) During his deposition, he elaborated on this opinion by stating that "[t]here could have been a light curtain, there could have been guarding – there are various ways to prevent the operator from getting their head in there while the dancer still has pressure." (Williamson Dep. at 97.) His report contained a separate opinion that "[t]he machine lacked adequate safeguards such as a light curtain that would have deactivated the machine when the operator entered the path of the dancer." (Williamson Report of January 10, 2003 at 4.) These opinions appear outside the realm of machinery control expertise possessed by this witness. The opinions appear to be conclusions based upon general knowledge. Accordingly, Mr. Williamson will not be permitted to testify as to the opinions expressed in paragraphs 1 through 3 of the conclusions to his report.

Marquip also contends that Williamson should not be permitted to testify with respect to alleged defects that bear no causal relationship to the accident in question. For example, Marquip points out that during his deposition, Williamson acknowledged that there was no evidence of the activation of an emergency stop mechanism so as to bring into play his opinions concerning the design of the e-stop circuitry or the absence of a manual pneumatic

release valve. (Williamson Dep. at 128.) In this regard, the following exchange is significant:

- Q. But you would agree with me then if the e-stop wasn't hit until after his accident, your conclusion in No. 4 and No. 6 [of your report] would not be relevant in this case?
- A. I would say they are relevant to the degree of, to what level safety was considered in designing this equipment.
- Q. Would it have any causative effect in this accident whatsoever?
- A. No.

(<u>Id</u>. at 130.) Accordingly, absent the presentation of evidence on behalf of either Defendant with respect to the failure to activate the e-stop, Mr. Williamson may not testify as to those purported defects.

Similarly, his final conclusion with respect to conflicting control schemes has no bearing on this particular case. In this regard, he testified that he had no evidence that a failure of a control played a causative role in the incident giving rise to this litigation. (Id. at 121.)

## ACCORDINGLY, IT IS HEREBY ORDERED THAT:

- Defendant Marquip, Inc.'s Motion in Limine to Preclude Plaintiff's Expert Joby G.
   Williamson (Dkt. Entry 222) is GRANTED IN PART.
- 2. Mr. Williamson shall be precluded from expressing opinions on the matters covered in paragraphs 1 through 4, 6 and 7 of his January 10, 2003 Report.

3. In all other respects, the Motion in Limine (Dkt. Entry 222) is **DENIED**.

# s/ Thomas I. Vanaskie

Thomas I. Vanaskie, Chief Judge Middle District of Pennsylvania